Base Year: 1999 By: S. Claire

SOURCE INVENTORY

CATEGORY #48

OIL PRODUCTION

1999 EMISSIONS

Introduction

Emission sources associated with oil production include waste pits, well blowouts, gas/liquid separation, heater treaters, control valves, pressure relief valves, spills, pipe fittings, pump seals and compressor seals. Organic emissions from all these fugitive sources are included in this category.

Methodology

Base year 1999 emissions were determined by using emission factors from EPA Manual AP-42. Throughput information for the oil production in each county was taken from the report "Oil and Gas Supervisor" of California's Department of Conservation. These represent the area source emissions.

The county fraction is apportioned according to the amount of oil produced per the Department of Conservation's report. Monthly and daily factors are assumed to be uniform.

The District also permits certain units at oil production facilities. These units count as point sources.

TRENDS

History

Over the past decade, California oil production has been declining. Oil production in the nine bay area counties peaked in the mid-1980's and has dropped steadily since. The number of producing oil wells in the nine bay counties have dropped from 87 in 1986 to 40 in 1998. Past year emissions for this category have varied with oil production activity.

Growth

According to California Energy Commission, future California oil production, although uncertain, is expected to decline at a small annual rate during the next 20 years. Statistical extrapolation from historical data produce a very broad range, varying between a 7 percent decline to 1 percent increase. California oil production is responsive to prevailing oil prices. If economically feasible, enhanced oil recovery techniques can be used to extract oil from fields that have been nearly depleted using conventional methods. According to

the “1996 Oil & Gas Supervisor” data, oil production in the bay area could actually increase despite the decrease in number of operating wells.

Control

The District adopted Regulation 8, Rule 37 on March 20, 1985 to control the amount of emissions at natural gas and crude oil production facilities. This rule has a control of 80% on reactive organic compounds, with a rule effectiveness of 90% reached by 1989.